

AMENDMENT
U.S. Appln. No. 09/938,860

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claim 1 (canceled).

Claim 2 (currently amended): Emulsion as set forth in ~~claim 1~~ claim 17, characterized by the fact that the compound of the latex family is selected from the group consisting of acrylic polymers, natural rubber, and synthetic rubbers that can be used in the form of an aqueous dispersion, wherein the synthetic rubbers are selected from the group consisting of:

EPDM (ethylene-propylene-diene-monomer),

EPM (ethylene-propylene monomer),

the S.B.R. (styrene-butadiene rubber) statistic or S.B.S. (styrene-butadiene-styrene) sequenced, linear or star-shaped, or S.I.S. (styrene-isoprene-styrene) styrene-butadiene copolymers,

polyisobutylene,

polybutadiene,

polyisoprene, and

polychloroprene.

Claim 3 (currently amended): Emulsion as set forth in ~~claim 1~~ claim 17, characterized by the fact that the latex family compound is introduced in a quantity that ranges between 5 and 30% by weight of the emulsion.

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Claim 4 (currently amended): Emulsion as set forth in ~~claim 1~~ claim 17, characterized by the fact that said clear synthetic binder contains at least one plasticizing agent with an oil fraction aromatic extract base and at least one structuring agent with an oil resin base.

Claim 5 (currently amended): Emulsion as set forth in ~~claim 1~~ claim 17, characterized by the fact that said clear synthetic binder contains at least one plasticizing agent with an aliphatic hydrocarbonic compound base, whose number of carbon atoms is greater than or equal to 20, and at least one structuring agent with a cycloaliphatic hydrocarbonic polymer base.

Claim 6 (currently amended): Emulsion as set forth in claim 5, characterized by the fact that the plasticizing agent is selected from the group consisting of:

natural aliphatic oils,

synthetic aliphatic oils, and

polymers with a low degree of polymerization having a viscosity index (VI) (according to the ASTM D2270 method) that is greater than or equal to 100, and

polyolefins.

Claim 7 (previously presented): Emulsion as set forth in claim 6, characterized by the fact that the aliphatic oils have an aniline point that is greater than or equal to 90°C (according to the ASTM D611 method).

Claim 8 (previously presented): Emulsion as set forth in claim 6, characterized by the fact that the aliphatic oils are hydrogenated white oils that contain at least 60% of paraffinic carbon atoms (according to the ASTM D2140 method).

Claim 9 (canceled).

Claim 10 (previously presented): Emulsion as set forth in claim 6, characterized by the fact that the polymers are polybutene, with a molecular mass number that ranges between 900

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and 2,600 and a kinematic viscosity at 100°C (according to the ASTM D445 method) that ranges between 200 and 4,600 cSt (or mm²/s).

Claim 11 (currently amended): Emulsion as set forth in claim 5, characterized by the fact that the structuring agent is ~~a polycycloaliphatic thermoplastic resin with a low molecular mass polycyclopentane~~.

Claim 12 (currently amended): Emulsion as set forth in claim 11, characterized by the fact that the ~~polycycloaliphatic thermoplastic resin~~ is polycyclopentane and has a softening point (ball-ring temperature) that is greater than 125°C, and a Gardner color index (according to the NFT 20-030 standard) of at the most 1.

Claim 13 (original): Emulsion as set forth in claim 4, characterized by the fact that the ratio by weight between the structuring agent and the plasticizing agent ranges between 0.4 and 1.5.

Claim 14 (currently amended): Emulsion as set forth in ~~claim 1~~ claim 4, characterized by the fact that the plasticizing agent is introduced in a quantity that ranges between 40 and 70% by weight of the clear synthetic binder.

Claim 15 (currently amended): Emulsion as set forth in ~~claim 1~~ claim 17, characterized by the fact that clear synthetic binder has a penetrability that ranges between 20 and 300 tenths of a millimeter.

Claim 16 (currently amended): Emulsion as set forth in ~~claim 1~~ claim 17, characterized by the fact that the clear synthetic binder ~~also~~ contains either vinyl ethylene-acetate (EVA) or S.B.S. sequenced styrene-butadiene copolymers, or low density polyethylene polymers.

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Claim 17 (previously presented): Synthetic bitumen emulsion, that can be used in making colored coatings, consisting essentially of clear binders and optionally colored pigments, characterized by the fact that it contains:

between 40 and 70% by mass of at least one clear synthetic binder with a softening point or a ball-ring temperature (TBA) measured in accordance with the NF T 66-008 standard, that ranges between 30 and 100°C,

between 5 and 30% by mass of at least one compound of the latex family,

between 60 and 30% by mass of water, and

between 3 and 10% by mass of at least one emulsifying agent.

Claim 18 (currently amended): Procedure for preparing an emulsion as set forth in ~~claim 4~~ claim 17, characterized by the fact that it consists of the following steps:

a) preparation of a synthetic binder, using a mixture that is substantially homogenous in its melted state of at least one plasticizing agent and at least one structuring agent,

b) emulsification of the synthetic binder obtained in a) using an aqueous solution of an emulsifying agent, while maintaining the mixture obtained at a temperature that is sufficient for obtaining a stable emulsion, and

c) cooling of the emulsion and incorporation of the latex in the form of an emulsion, under agitation at room temperature.

Claim 19 (original): Procedure as set forth in claim 18, characterized by the fact that step a) consists in mixing the components of the synthetic binder at a temperature that ranges between 180 and 200°C.

Claim 20 (original): Procedure as set forth in claim 18, characterized by the fact that the second step b), consists of the incorporation into the synthetic binder, under agitation, of an

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emulsifying solution made from a non-ionic or cationic emulsifier, introduced at a ratio that ranges between 3 and 8% by mass of the emulsifying solution.

Claim 21 (previously presented): Procedure as set forth in claim 18, characterized by the fact that in step c) the latex emulsion is either non-ionic or cationic, and the incorporation of the latex emulsion is carried out at a ratio that ranges between approximately 15 and 30% by mass, at room temperature.

Claim 22 (original): Procedure as set forth in claim 18, characterized by the fact that the synthetic binder is obtained by mixing a plasticizing agent that consists of an aliphatic hydrocarbonic compound, whose number of carbon atoms is greater than or equal to 20 and a structuring agent that consists of a cycloaliphatic hydrocarbonic polymer.

Claim 23 (currently amended): Application of an emulsion as set forth in ~~claim 1~~ claim 17, to the making of a colored surface treatment on a damp-proofing material that consists of at least one base coat, characterized by the fact that the synthetic bitumen deposit, to which are added colored pigments, is obtained by spreading this emulsion on the base coat and breaking down the emulsion by evaporation of its water.

Claim 24 (original): Application as set forth in claim 23, characterized by the fact that the surface treatment layer has a ball-ring temperature (TBA) that is greater than 160°C.

Claim 25 (currently amended): Application of an emulsion as set forth in ~~claim 1~~ claim 17, to the making of a colored surface treatment for cold roadway applications on a support, characterized by the fact that the deposit of the synthetic binder, to which are added colored pigments and aggregates, is obtained by cold spreading and chemical break down of said emulsion.

Claim 26 (canceled).

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Claim 27 (previously presented): Emulsion as set forth in claim 7, characterized by the fact that the aliphatic oils have an aniline point that is greater than or equal to 110°C (according to the ASTM D611 method).

Claim 28 (currently amended): Emulsion as set forth in ~~claim 1~~ claim 6, characterized by the fact that the polymers that make up the plasticizing agent have a viscosity index (VI) (according to the ASTM D2270 method) that is greater than or equal to 120.

Claim 29 (canceled).

Claim 30 (previously presented): Application of an emulsion as set forth in claim 23, wherein the damp-proofing material is a membrane or coat.

Claim 31 (previously presented): Application of an emulsion as set forth in claim 25, wherein the cold roadway applications are selected from the group consisting of sealing coats, cold poured coats, and slurries.

Claim 32 (new): Synthetic bitumen emulsion, that can be used in making colored coatings, consisting essentially of clear binders and optionally colored pigments, characterized by the fact that it contains:

at least one clear synthetic binder with a softening point or a ball-ring temperature (TBA), measured in accordance with the NF T 66-008 standard, that ranges between 30 and 100°C,

at least one compound of the latex family, introduced in a quantity that ranges between 3 and 40% by weight of the emulsion,

water,

and at least one emulsifying agent,

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characterized by the fact that said clear synthetic binder contains at least one plasticizing agent with an oil fraction aromatic extract base and at least one structuring agent with an oil resin base.

Claim 33 (new): Emulsion as set forth in claim 32, characterized by the fact that the ratio by weight between the structuring agent and the plasticizing agent ranges between 0.4 and 1.5.

Claim 34 (new): Emulsion as set forth in claim 32, characterized by the fact that the plasticizing agent is introduced in a quantity that ranges between 40 and 70% by weight of the clear synthetic binder.

Claim 35 (new): Synthetic bitumen emulsion, that can be used in making colored coatings, consisting essentially of clear binders and optionally colored pigments, characterized by the fact that it contains:

at least one clear synthetic binder with a softening point or a ball-ring temperature (TBA), measured in accordance with the NF T 66-008 standard, that ranges between 30 and 100°C,

at least one compound of the latex family, introduced in a quantity that ranges between 3 and 40% by weight of the emulsion,

water,

and at least one emulsifying agent,

characterized by the fact that clear synthetic binder has a penetrability that ranges between 20 and 300 tenths of a millimeter.

Claim 36 (new): Procedure for preparing a synthetic bitumen emulsion that can be used in making colored coatings,

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the synthetic bitumen emulsion consisting essentially of clear binders and optionally colored pigments, characterized by the fact that the synthetic bitumen emulsion contains:

at least one clear synthetic binder with a softening point or a ball-ring temperature (TBA), measured in accordance with the NF T 66-008 standard, that ranges between 30 and 100°C,

at least one compound of the latex family, introduced in a quantity that ranges between 3 and 40% by weight of the emulsion,

water,

and at least one emulsifying agent,

characterized by the fact that the procedure consists of the following steps:

a) preparation of a synthetic binder, using a mixture that is substantially homogenous in its melted state of at least one plasticizing agent and at least one structuring agent,

b) emulsification of the synthetic binder obtained in a) using an aqueous solution of an emulsifying agent, while maintaining the mixture obtained at a temperature that is sufficient for obtaining a stable emulsion, and

c) cooling of the emulsion and incorporation of the latex in the form of an emulsion, under agitation at room temperature.

Claim 37 (new): Procedure as set forth in claim 36, characterized by the fact that step a) consists in mixing the components of the synthetic binder at a temperature that ranges between 180 and 200°C.

Claim 38 (new): Procedure as set forth in claim 36, characterized by the fact that the second step b), consists of the incorporation into the synthetic binder, under agitation, of an emulsifying solution made from a non-ionic or cationic emulsifier, introduced at a ratio that ranges between 3 and 8% by mass of the emulsifying solution.

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Claim 39 (new): Procedure as set forth in claim 36, characterized by the fact that in step c) the latex emulsion is either non-ionic or cationic, and the incorporation of the latex emulsion is carried out at a ratio that ranges between approximately 15 and 30% by mass, at room temperature.

Claim 40 (new): Procedure as set forth in claim 36, characterized by the fact that the synthetic binder is obtained by mixing a plasticizing agent that consists of an aliphatic hydrocarbonic compound, whose number of carbon atoms is greater than or equal to 20 and a structuring agent that consists of a cycloaliphatic hydrocarbonic polymer.

Claim 41 (new): Application of a synthetic bitumen emulsion,

wherein the synthetic bitumen emulsion consists essentially of clear binders and optionally colored pigments, characterized by the fact that the synthetic bitumen emulsion contains:

at least one clear synthetic binder with a softening point or a ball-ring temperature (TBA), measured in accordance with the NF T 66-008 standard, that ranges between 30 and 100°C,

at least one compound of the latex family, introduced in a quantity that ranges between 3 and 40% by weight of the emulsion,

water,

and at least one emulsifying agent,

wherein the application of the synthetic bitumen emulsion is to the making of a colored surface treatment on a damp-proofing material that consists of at least one base coat, characterized by the fact that the synthetic bitumen deposit, to which are added colored pigments, is obtained by spreading this emulsion on the base coat and breaking down the emulsion by evaporation of its water.

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Claim 42 (new): Application as set forth in claim 41, characterized by the fact that the surface treatment layer has a ball-ring temperature (TBA) that is greater than 160°C.

Claim 43 (new): Application of an emulsion as set forth in claim 41, wherein the damp-proofing material is a membrane or coat.

Claim 44 (new): Application of a synthetic bitumen emulsion,

wherein the synthetic bitumen emulsion consists essentially of clear binders and optionally colored pigments, characterized by the fact that the synthetic bitumen emulsion contains:

at least one clear synthetic binder with a softening point or a ball-ring temperature (TBA), measured in accordance with the NF T 66-008 standard, that ranges between 30 and 100°C,

at least one compound of the latex family, introduced in a quantity that ranges between 3 and 40% by weight of the emulsion,

water,

and at least one emulsifying agent,

wherein the application of the synthetic bitumen emulsion is to the making of a colored surface treatment for cold roadway applications on a support, characterized by the fact that the deposit of the synthetic binder, to which are added colored pigments and aggregates, is obtained by cold spreading and chemical break down of said emulsion.

Claim 45 (new): Application of an emulsion as set forth in claim 44, wherein the cold roadway applications are selected from the group consisting of sealing coats, cold poured coats, and slurries.